CLAIMS

What is claimed is:

- A diagram system comprising:

 a diagram that stores at least one shape element; and,
 an application program interface that includes a control that facilitates access to

 the diagram, the control maintaining state information associated with the diagram.
- 2. The system of claim 1, the state information comprising at least one of selection, zoom and scroll position.
- 3. The system of claim 1, the control captures operating system events.
- 4. The system of claim 3, the control providing at least some of the operating system events to the shape element.
- 5. The system of claim 1, the control rerouting at least one of paint, keyboard and mouse events to at least one of the diagram and the shape element.
- 6. The system of claim 1, the diagram and the shape element responsible for painting themselves.
- 7. The system of claim 1, the diagram and/or the shape element being responsible for responding to a user interaction.
- 8. The system of claim 1, the shape element being based, at least in part, upon a model element class.
- 9. The system of claim 1, the diagram being based, at least in part, upon a node shape that has a bounds property which defines its location and size, the node shape derived from the shape element.

- 10. The system of claim 1, at least one shape element having a child shape element.
- 11. The system of claim 1, the shape element derived from a presentation element.
- 12. The system of claim 1, the shape element comprising at least one of a geometry property, a style set property and a shape fields property.
- 13. The system of claim 1, the diagram having a graph object employed for hittesting.
- 14. The system of claim 1, the shape element being control-less.
- 15. A method that facilitates access to a diagram comprising: employing a control to access a diagram; and, storing at least one shape element contained by the diagram.
- 16. The method of claim 15, the control maintaining state information associated with the diagram.
- 17. A computer readable medium having stored thereon computer executable instructions for carrying out the method of claim 15.
- 18. A data packet transmitted between two or more computer components that facilitates diagramming, the data packet comprising:
- a data field comprising a diagram, the diagram comprising at least one shape element, the diagram and/or the shape element being responsible for painting themselves and responding to a user interaction.
- 19. A computer readable medium storing computer executable components of a diagram system comprising:
 - a diagram component that stores at least one shape element; and,

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an application program interface component that includes a control that facilitates access to the diagram, the control maintaining state information associated with the diagram.

20. A diagram system comprising:

means for storing at least one shape element in a diagram, the diagram and/or the shape element being responsible for painting themselves and responding to a user interaction;

means for accessing the diagram; and, means for maintaining state information associated with the diagram.